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ABSTRACT

The traditional methods of assessing the academic programs in the liberal arts are inappropriate for evaluating vocational and technical programs. In traditional academic disciplines, assessment of instruction is conducted in two fashions: student evaluation at the end of a course and institutional assessment of its goals and mission. Because of immeasurable missions and goal statements, academic assessment is imprecise at best and insurmountable at worst. However, the mission of vocational training is simple and straightforward--to train an individual for a specific profession. Consequently, the quality of instruction and training, the overall content of a degree or certificate program, and the employability and success of students can be easily measured, tracked, evaluated, and, when necessary, updated and modified. A three-phase model takes into consideration three factors that can ensure the success of a vocational training program: relevance, accountability, and institutional image. Only the employers and the practitioners can determine and should dictate the direction of the vocational programs. Vocational institutions should collaborate with their area employers and industries to determine the direction of course offerings and programs. (YLB)

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Evaluating Vocational Programs: A Three Dimensional Model

by

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ABSTRACT

The primary mission of vocational and technical institutions, frequently, is to train the students for professional careers. Consequently, the three key questions for such training institutions ought to be:

What and how much have the students learned?
How successful are the students in applying the knowledge in their respective careers?
What do the employers think of the quality of the students' preparation and training?

This paper argues that the traditional methods of assessing/evaluating the academic programs in the liberal arts are inappropriate for assessing vocational and technical programs. The authors suggest a three-phase model that takes into consideration factors such as *relevance*, *accountability*, and *institutional image*.

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INTRODUCTION

In traditional academic disciplines, assessment of instruction in conducted in two fashions: there is a student evaluation at the end of a course, and there is the institutional assessment of its (long-term) goals and mission.

Student Evaluation

Student evaluations are, more often, used to make promotion and tenure decisions about a faculty member. Students evaluations are rarely used to alter, modify, and improve a course content. The results, and comments, of the students on the end-of-the-semester evaluations hold the potential as a strong instrument for formative evaluation, however, these comments are disregarded by many of the (already) tenured faculty, and are used as popularity contests by those seeking promotion and tenure.

Assessment of instruction is also conducted by looking at the performance of the students on a final examination and/or a final project. The common assumption is that if a student has earned an "A", his/her level of learning is higher than that of a student who earned a "B" or a "C." This assumption leads to the following conclusion: If there is a higher percentage of students with "A" and "B" grades, more learning has taken place, i.e., the teacher has done a successful job. Assessment of instruction, when based on the final grades of the students, may lead to a *grade inflation* where "A" comes to stand for *average* and "B" for *below average.*

Even when standardized tests are used to measure instructional outcomes, the temptation to have one's students perform well may result in the practice of "teaching to the test."

An institution's long-term goals for it's students are measured in terms of (1) percentage of students that complete the degree/diploma programs and, (2) percentages of students that are accepted into graduate programs or professional schools such as architecture, engineering, law, medicine and nursing. Factors such as how many of the

graduates did get jobs in the fields of their training, or how much money they made, or how quickly they were promoted, or what percentage *never* used their training, are hardly ever a part of an academic institution's self-assessment plan.

MISSION OF VOCATIONAL EDUCATION AND TRAINING

While traditional 4-year programs claim to offer "a well-rounded" liberal arts education to prepare "responsible and productive citizens of tomorrow", graduate programs maintain that they train the researchers for the future. Both are worthwhile missions, however; both are somewhat intangible and difficult to measure. It is because of such immeasurable missions and goal statements that academic assessment is imprecise at best, and insurmountable at worst.

The mission of vocational training is simple and straightforward: to train an individual for a specific profession. Consequently, the quality of instruction and training, the over-all content of a degree or a certificate program, and the employability and success of the students can be easily measured, tracked, evaluated, and whenever necessary, updated and modified.

THREE DIMENSIONS OF EVALUATING VOCATIONAL INSTRUCTION

Technology driven products such as automobiles, computers, electronic equipment, and training for technology based vocations such as television production, audio recording, digital imaging, computer assisted drafting and bio-tech /pharmaceutical industries is changing at such a rate that equipment, textbooks, and instructors' note become out-dated every semester. There is a constant need for upgrading the equipment and retraining the instructors. In most of the areas of vocational education, change is the only constant.

Under such conditions of rapid change, it would be unwise for the vocational education faculty to remain in its ivory tower and disregard metamorphosis and evolution

occurring in the workplace. While the student enrollments in traditional 4-year programs are on the decline, the vocational institutions are experiencing growth. Having more students knocking on one's doors can mean two things: either the admission standards are lowered, or there is an increase in the demand for vocational training. The authors of this paper have elected to view the increase in students as an indicator of greater demand rather than the pessimistic alternative.

Present authors also feel that the credit for the success of vocational programs does not go to the faculty alone. For vocational education to be successful, it has to be a collaborative effort between a vocational institute and the publics that it serves. Three factors can assure success of a vocational/training program.

1. Relevance. The offerings of a vocational institution have to be relevant to the job market. Faculty members and administrators can only make educated guesses about what programs to offer, or what courses to teach. Institutions should concern themselves with questions such as: Are the students learning what is needed in the job market? Will it get them hired? Will they be able to transfer the classroom learning to the workplace?

Institutions can take several measures to ensure that the programs and course offerings are in line with the changing demands of the job markets. Two common practices are: (1) make use of advisory boards, and (2) gather qualitative data through focus groups.

Advisory Boards are made up of representatives from the local industries and other companies that do or may hire the graduates of an institutions. These board members can be the local plant managers, bankers, engineers, personnel directors, and training and orientation directors. These individuals are in a much better position to predict about the future needs and demands of their respective industries than the instructors or the academic administrators. Listening to the present and future needs from various employers can provide direction not only for individual courses but also for full-fledged programs.

Focus Groups can be used to gather data about the immediate and future needs of the employers. Focus groups can also be used to generate lists of skills and competencies needed in a particular field or on a particular job.

2. Accountability. There are two important aspect that pertain to the accountability of an institution. Both can be posed as the following questions -

1. Can the students get the jobs in the fields of their training?
2. Can they perform in those jobs at the expected level and are they rewarded and promoted accordingly?

Data on these two issues can be generated through surveys of the employers and students. Theoretically, if the programs and courses were designed according to the industry and job market demands, and if appropriate instruction and learning experiences are provided to the students, the students would be employable and should be able to succeed in the work place. Surveys of students, and focus groups with potential employers can identify any mismatch in the needs of the job market and the curricula.

3. Institutional Image. The image of a vocational institution is based on the performance of its graduates. In many instances, the image is a matter of perception. Some questions to ask are:

1. Do the employers think that an institution can prepare its students adequately?
2. Do the students and the employers think that an institution's diploma or certificate guarantees adequate preparation?

Assessment of the institutional image can also be carried out by survey, Delphi technique, and focus group methods.

In conclusion, the authors would like to repeat that the traditional methods of instructional assessment through student evaluation and longitudinal surveys of the alumni are inappropriate for assessing vocational programs. The students, in most instances, are not able to judge the utility and application of a course. Even the

instructors may not be fully aware of the "real world" utility of their course contents. Only the employers and the practitioners can determine, and, should dictate the direction of the vocational programs. The surveys of alumni (after five or ten years after graduation) are equally inappropriate in fields where the technology seems to change every six months or so.

Our recommendation is that the vocational institutions should collaborate with their area employers and industries to determine the direction of course offerings and programs.

Some vocational institutions, at least in the past, have insisted on attempting to provide their students with training on the most up-to-date and state-of-the-art equipment and technology. We believe that such as effort is unnecessary. Local plants and industries are more than willing to have the students come to their facilities and acquire training on their equipment and machinery. It is no longer necessary for the educational institutions to continue to make capital investments in new and latest equipment. Instead, the focus of vocational instruction should be to provide generic training that is transferable to new or newer technology. The vocational institutions would get better mileage from their capital investment dollars if those funds were redirected into the training of its faculty.